

1. A method to singulate a circuit die from an integrated circuit wafer, said method comprising:

providing an integrated circuit wafer containing a circuit die;

5 cutting through said integrated circuit wafer by performing a single, continuous cut around the perimeter of said circuit die to thereby singulate said circuit die.

2. The method according to Claim 1 wherein said singulated circuit die comprises a non-rectangular perimeter.

3. The method according to Claim 1 wherein said singulated circuit die comprises a perimeter having rounded corners.

4. The method according to Claim 1 wherein said singulated circuit die comprises a perimeter having more than four sides.

5. The method according to Claim 1 wherein said singulated circuit die comprises a perimeter having three sides.

6. The method according to Claim 1 wherein said singulated circuit die comprises an elliptical perimeter.

7. The method according to Claim 1 wherein said singulated circuit die comprises a circular perimeter.

8. The method according to Claim 1 wherein said step of cutting through is performed using a laser.

9. The method according to Claim 1 wherein said step of cutting through is performed using an electron beam or water jet.

10. The method according to Claim 1 further comprising:  
fixably mounting said singulated circuit die onto a package; and  
coupling signal pins of said package to signals in  
5 said electronic circuit.

11. A method to singulate a circuit die from an integrated circuit wafer, said method comprising:

providing an integrated circuit wafer containing a circuit die;

5 cutting through said integrated circuit wafer by performing a single, continuous cut around the perimeter of said circuit die to thereby singulate said circuit die and

wherein said singulated circuit die comprises a non-rectangular perimeter;

10 fixably mounting said singulated circuit die to a package; and

coupling signal pins of said package to signals in said electronic circuit.

12. The method according to Claim 11 wherein said non-rectangular perimeter has rounded corners.

13. The method according to Claim 11 wherein said non-rectangular perimeter more than four sides.

14. The method according to Claim 11 wherein said non-rectangular perimeter has three sides.

15. The method according to Claim 11 wherein said non-rectangular perimeter is an ellipse.

16. The method according to Claim 11 wherein said non-rectangular perimeter is a circle.

17. The method according to Claim 11 wherein said step of cutting through is performed using a laser.

18. The method according to Claim 11 wherein said step of cutting through is performed using an electron beam or a water jet.

19. A method to singulate a circuit die from an integrated circuit wafer, said method comprising:

providing an integrated circuit wafer containing a circuit die;

5 cutting through said integrated circuit wafer on a first part of the perimeter of said circuit die using a focused beam apparatus; and

10 cutting through integrated circuit wafer on a second part of said perimeter of said circuit die using a wafer saw blade apparatus to thereby singulate said circuit die.

20. An integrated circuit device comprising:

a semiconductor substrate containing an electronic circuit wherein said semiconductor substrate has a non-rectangular perimeter; and

5 a package comprising:

a surface to fixably mount said semiconductor substrate;

a plurality of signal pins; and

10           a means of coupling said signal pins to signals  
          in said electronic circuit.

21. The device according to Claim 20 wherein said  
non-rectangular perimeter has rounded corners.

22. The device according to Claim 20 wherein said non-  
rectangular perimeter has more than four sides.

23. The device according to Claim 20 wherein said non-  
rectangular perimeter has three sides.

24. The device according to Claim 20 wherein said non-  
rectangular perimeter is an ellipse.

25. The device according to Claim 20 wherein said non-  
rectangular perimeter is an "L" shape, an "H" shape, a "T"  
shape, or a curved shape.